



PCT10

RAW SEQUENCE LISTING

DATE: 10/24/2002

PATENT APPLICATION: US/10/019,823A

TIME: 15:36:28

Input Set : A:\SYN-128.ST25.txt

Output Set: N:\CRF4\10242002\J019823A.raw

3 <110> APPLICANT: Zeneca Limited
 5 <120> TITLE OF INVENTION: Insecticidal Proteins from Paecilomyces and Synergistic
 6 Combinations Thereof
 8 <130> FILE REFERENCE: SYN-128
 10 <140> CURRENT APPLICATION NUMBER: US 10/019,823A
 C--> 11 <141> CURRENT FILING DATE: 2002-08-21
 13 <150> PRIOR APPLICATION NUMBER: PCT/GB00/02457
 14 <151> PRIOR FILING DATE: 2000-06-23
 16 <150> PRIOR APPLICATION NUMBER: GB 9915215.9
 17 <151> PRIOR FILING DATE: 1999-06-29
 19 <150> PRIOR APPLICATION NUMBER: GB 9930536.9
 20 <151> PRIOR FILING DATE: 1999-12-23
 22 <160> NUMBER OF SEQ ID NOS: 65
 24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 33
 28 <212> TYPE: PRT
 29 <213> ORGANISM: Paecilomyces sp.
 31 <220> FEATURE:
 32 <221> NAME/KEY: VARIANT
 33 <222> LOCATION: 1, 2
 34 <223> OTHER INFORMATION: Xaa = Any Amino Acid
 36 <400> SEQUENCE: 1
 W--> 37 Xaa Xaa Ile Cys Thr Pro Ala Gly Val Lys Cys Pro Ala Ala Leu Pro
 38 1 5 10 15
 39 Cys Cys Pro Gly Leu Arg Cys Ile Gly Gly Val Asn Asn Lys Val Cys
 40 20 25 30
 41 Arg
 45 <210> SEQ ID NO: 2
 46 <211> LENGTH: 33
 47 <212> TYPE: PRT
 48 <213> ORGANISM: Paecilomyces sp.
 50 <400> SEQUENCE: 2
 51 Gly Lys Ile Cys Thr Pro Ala Gly Val Lys Cys Pro Ala Ala Leu Pro
 52 1 5 10 15
 53 Cys Cys Pro Gly Leu Arg Cys Ile Gly Gly Val Asn Asn Lys Val Cys
 54 20 25 30
 55 Arg
 59 <210> SEQ ID NO: 3
 60 <211> LENGTH: 35
 61 <212> TYPE: PRT
 62 <213> ORGANISM: Paecilomyces sp.
 64 <220> FEATURE:

see P.6
ENTERED

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65 <221> NAME/KEY: VARIANT
66 <222> LOCATION: 1, 2
67 <223> OTHER INFORMATION: Xaa = Any Amino Acid
68 <400> SEQUENCE: 3
W--> 70 Xaa Xaa Gly Lys Ile Cys Thr Pro Ala Gly Val Lys Cys Pro Ala Ala
71 1 5 10 15
72 Leu Pro Cys Cys Pro Gly Leu Arg Cys Ile Gly Gly Val Asn Asn Lys
73 20 25 30
74 Val Cys Arg
75 35
78 <210> SEQ ID NO: 4
79 <211> LENGTH: 332
80 <212> TYPE: DNA
81 <213> ORGANISM: Paecilomyces sp.
82 <400> SEQUENCE: 4
84 ggcaagatct gcaactctgc tggagttgta cgtattttca tccatttcct ycaccactcc 60
85 tctaacaatga agcaactctc tcttctctct agaaatgtcc cgcggtctct ccttgctgcc 120
86 ccggacttcg ctgcatcggc ggcgtcaacg taagtcacca tggatctggc aagcgaagacc 180
87 ataacaatgac gcagtatact aaccctggcc gttatagaac aaggttgtag gtcgacatgt 240
88 tktacaacct ctacaaacgc gcgcactaat gacaacggta gtgccggtaa ttctagtgtc 300
89 gcaacttttg agcgtgggat aagtatgctt cg 332
91 <210> SEQ ID NO: 5
92 <211> LENGTH: 320
93 <212> TYPE: DNA
94 <213> ORGANISM: Paecilomyces sp.
95 <400> SEQUENCE: 5
97 gggaaaattt gtacgccgcg gggggttgta cgtatttctca tccatttcct ccaccactcc 60
98 tctaacaatga agcaactctc tcttctctct agaaatgtcc cgcggtctct ccttgctgcc 120
99 ccggacttcg ctgcatcggc ggcgtcaacg taagtcacca tcctgacacg acgtgaaggc 180
100 aatgtactga ccctggccgt tatagaacaa ggttgtagt cgacatgttt tacaacctct 240
101 acaaacgcgc gcaactaatga caacgtagt gccggtaatt ctagtgtcgc aacttttgag 300
102 cgtgggataa gtatgcttcg 320
104 <210> SEQ ID NO: 6
105 <211> LENGTH: 320
106 <212> TYPE: DNA
107 <213> ORGANISM: Paecilomyces sp.
108 <400> SEQUENCE: 6
110 gggaaaattt gtacgccgcg gggggttgta cgtattttca tccatttcct ccaccactcc 60
111 tctaacaatga agcaactctc tcttctctct araaatgtcc cgcggtctct ccttgctgcc 120
112 ccggacttcg ctgcatcggc ggcgtcaacg taagtcacca tcctgacacg acgtgaaggc 180
113 aatgtactga ccctggccgt tatagaacaa ggttgtagt cgacatgttt tacaacctct 240
114 acaaacgcgc gcaactaatga caacgtagt gccggtaatt ctagtgtcgc aacttttgag 300
115 cgtgggataa gtatgcttcg 320
117 <210> SEQ ID NO: 7
118 <211> LENGTH: 174
119 <212> TYPE: DNA
120 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: Synthetic polynucleotide codon optimised

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125 <400> SEQUENCE: 7
126 atgggtggca gcggcagggc tgctctgctg ctggccctgg tggccgtgag cctggccgtg 60
127 gagatccagg ccggcaagat ctgcaccccg gccggcgctga agtgcccggc cgccctcccg 120
128 tgctgcccgg gcctccgctg catcggcggc gtgaacaaca aggtgtgccg ctga 174
130 <210> SEQ ID NO: 8
131 <211> LENGTH: 174
132 <212> TYPE: DNA
133 <213> ORGANISM: Artificial Sequence
135 <220> FEATURE:
136 <223> OTHER INFORMATION: Synthetic polynucleotide codon optimised
138 <400> SEQUENCE: 8
139 atgggtggca gcggcagggc tgctctgctg ctggccctgg tggccgtgag cctggccgtg 60
140 gagatccagg ccggtaaaat ttgtaccccg gccggcgctga agtgcccggc cgccctcccg 120
141 tgttgtccgg gcctcagggt tattggtggt gtgaataata aagtgtgtcg ctga 174
143 <210> SEQ ID NO: 9
144 <211> LENGTH: 363
145 <212> TYPE: DNA
146 <213> ORGANISM: Artificial Sequence
148 <220> FEATURE:
149 <223> OTHER INFORMATION: Synthetic sequence containing intron sequence
151 <400> SEQUENCE: 9
152 atgggtggca gcggcagggc tgctctgctg ctggccctgg tggccgtgag cctggccgtg 60
153 gagatccagg ccggcaagat ctgcactcct gctggagttg tttgtttctg ctctacctt 120
154 tgatatatat ataataatta tcattaatta gtagtaatat aatatttcaa atattttttt 180
155 caaaataaaa gaatgtagta tatagcaatt gcttttctgt agtttataag tgtgtatatt 240
156 ttaatttata acttttctaa tatatgacca aaacatgggt atgtttagaa atgtcccgcg 300
157 gctcttcctt gctgcccccg acttcgctgc atcggcggcg tcaacaacaa ggtttgcccg 360
158 taa 363
160 <210> SEQ ID NO: 10
161 <211> LENGTH: 369
162 <212> TYPE: DNA
163 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Synthetic sequence
168 <400> SEQUENCE: 10
169 atgggtggca gcggcagggc tgctctgctg ctggccctgg tggccgtgag cctggccgtg 60
170 gagatccagg cctctacgg caagatctgc actcctgctg gagggtgtt tttctgcttc 120
171 tacctttgat atatataata taattatcat taattagtag taatataata tttcaaatat 180
172 ttttttcaaa ataaaagaat gtagtatata gcaattgctt ttctgtagtt tataagtgtg 240
173 tatattttaa ttataactt ttctaataata tgacaaaac atggtgatgt ttagaaatgt 300
174 cccgcggctc ttccttgcgt ccccgactt cgctgcacg gcggcgtaa caacaagggt 360
175 tgccggtaa 369
177 <210> SEQ ID NO: 11
178 <211> LENGTH: 363
179 <212> TYPE: DNA
180 <213> ORGANISM: Artificial Sequence
182 <220> FEATURE:
183 <223> OTHER INFORMATION: Synthetic sequence
185 <400> SEQUENCE: 11

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186 atgggtggca gcggcagggc tgctctgctg ctggccctgg tggccgtgag cctggccgtg 60
187 gagatccagg cctcctacat ctgcactcct gctggagtgg tttgtttctg cttctacctt 120
188 tgatataatat ataataatta tcattaatta gtagtaatat aatatttcaa atattttttt 180
189 caaaataaaaa gaatgtagta tatagcaatt gcttttctgt agtttataag tgtgtatatt 240
190 ttaattttata actttttctaa tatatgacca aaacatgggt atgttttagaa atgtcccgcg 300
191 gctcttcctt gctgcccccg acttcgctgc atcgcgcgcg tcaacaacaa ggtttgcccg 360
192 taa 363
194 <210> SEQ ID NO: 12
195 <211> LENGTH: 363
196 <212> TYPE: DNA
197 <213> ORGANISM: Artificial Sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: Synthetic sequence containing intron and codon
201 optimised
203 <400> SEQUENCE: 12
204 atgggtggca gcggcagggc tgctctgctg ctggccctgg tggccgtgag cctggccgtg 60
205 gagatccagg ccggcaagat ctgcaccccg gccggcgtgg tttgtttctg cttctacctt 120
206 tgatataatat ataataatta tcattaatta gtagtaatat aatatttcaa atattttttt 180
207 caaaataaaaa gaatgtagta tatagcaatt gcttttctgt agtttataag tgtgtatatt 240
208 ttaattttata actttttctaa tatatgacca aaacatgggt atgttttagaa gtgccccgcc 300
209 gccctcccg gctgccccgg cctccgctgc atcgcgcgcg tgaacaacaa ggtgtgccgc 360
210 tga 363
212 <210> SEQ ID NO: 13
213 <211> LENGTH: 439
214 <212> TYPE: DNA
215 <213> ORGANISM: Paecilomyces sp.
217 <400> SEQUENCE: 13
218 tctacttctt catctcacgc catatatcct cccaaaatca cacctcttcc ttcaccatgc 60
219 aaatctccgc cgctcattgtc gcaactcttcg ccagcgccgc catggccggc aagatctgca 120
220 ctctctgctg agttgtacgt attttcatcc atttctyca ccactcctct aacatgaagc 180
221 aactttctct tctctctaga aatgtcccgc ggctcttcc tgcgtccccg gacttcgctg 240
222 catcgggcgc gtcaacgtaa gtcaccatgg atctggcaag cgagaccata acatgacgca 300
223 gtatactaac cctggccggt atagaacaag gttgtgagtc gacatgttkt acaacctcta 360
224 caaacgcgcg cactaatgac aacggtagtg ccgtaattc tagtgtcgca acttttgagc 420
225 gtgggataag tatgcttcg 439
227 <210> SEQ ID NO: 14
228 <211> LENGTH: 102
229 <212> TYPE: DNA
230 <213> ORGANISM: Paecilomyces sp.
232 <400> SEQUENCE: 14
233 ggcaagatct gcaactctgc tggagttaaa tgtcccgcgg ctcttccttg ctgccccgga 60
234 ctctcgctgca tcggcgcgct caacaacaag gtttgccggt aa 102
236 <210> SEQ ID NO: 15
237 <211> LENGTH: 84
238 <212> TYPE: DNA
239 <213> ORGANISM: Dahlia sp.
241 <400> SEQUENCE: 15
242 atgggttaata gatctgttgc tttttctgct tttgtttcta ttctttttgt tttggctatt 60
243 tcagatattg cttctgtttc agga 84

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245 <210> SEQ ID NO: 16
246 <211> LENGTH: 87
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: Radish signal sequence
253 <400> SEQUENCE: 16
254 atggctaagt ttgcttctat tattgctctt ttgtttgctg cacttgtttt gtttgctgca 60
255 ttggaagctc caactatggt tgaagct                                     87
257 <210> SEQ ID NO: 17
258 <211> LENGTH: 72
259 <212> TYPE: DNA
260 <213> ORGANISM: Zea mays
262 <400> SEQUENCE: 17
263 atgggttgga gcggcagggc tgctctgctg ctggccctgg tggccgtgag cctggccgtg 60
264 gagatccagg cc                                               72
266 <210> SEQ ID NO: 18
267 <211> LENGTH: 90
268 <212> TYPE: DNA
269 <213> ORGANISM: Nicotiana sp.
271 <400> SEQUENCE: 18
272 atgggatttg ttctcttttc acaattgcct tcatttcttc ttgtctctac acttctctta 60
273 ttcttagtaa tatccactc ttgccgtgcc                               90
275 <210> SEQ ID NO: 19
276 <211> LENGTH: 51
277 <212> TYPE: DNA
278 <213> ORGANISM: Paecilomyces sp.
280 <400> SEQUENCE: 19
281 atgcaaattc ccgccgtcat tgtcgcactc ttgccacgc ccgccatggc c          51
283 <210> SEQ ID NO: 20
284 <211> LENGTH: 28
285 <212> TYPE: PRT
286 <213> ORGANISM: Dahlia sp.
288 <400> SEQUENCE: 20
289 Met Val Asn Arg Ser Val Ala Phe Ser Ala Phe Val Leu Ile Leu Phe
290 1          5          10          15
291 Val Leu Ala Ile Ser Asp Ile Ala Ser Val Ser Gly
292          20          25
295 <210> SEQ ID NO: 21
296 <211> LENGTH: 29
297 <212> TYPE: PRT
298 <213> ORGANISM: Artificial Sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: Radish protein target sequence
303 <400> SEQUENCE: 21
304 Met Ala Lys Phe Ala Ser Ile Ile Ala Leu Leu Phe Ala Ala Leu Val
305 1          5          10          15
306 Leu Phe Ala Ala Phe Glu Ala Pro Thr Met Val Glu Ala
307          20          25

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/24/2002
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1,2
Seq#:3; Xaa Pos. 1,2
Seq#:30; N Pos. 9,12,15
Seq#:31; N Pos. 9,12,15,18
Seq#:32; N Pos. 3,6,9,12,15
Seq#:33; N Pos. 3,12,15
Seq#:34; N Pos. 2,14
Seq#:35; N Pos. 3,6,18
Seq#:36; N Pos. 12,15,18,21,24
Seq#:37; N Pos. 3,6,9,12,21,24
Seq#:38; N Pos. 6,9,12,15,18
Seq#:39; N Pos. 9,12,15
Seq#:43; N Pos. 23,24,25,26,27
Seq#:48; N Pos. 3,15,18,21
Seq#:54; Xaa Pos. 602
Seq#:60; Xaa Pos. 1,2,3,5,6,7,8,9,10,12,13,14,15,16,19,20,21,22,24,25,26,27
Seq#:60; Xaa Pos. 28,29,30,31,33
Seq#:65; Xaa Pos. 1,2

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L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:37 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:70 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:409 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:413 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:30
L:414 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:424 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:428 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:31
L:429 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0
L:439 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:443 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:32
L:444 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
L:454 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:458 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:33
L:459 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:469 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:473 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:34
L:474 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0
L:484 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:488 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:35
L:489 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0
L:499 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:503 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:36
L:504 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0
L:514 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:518 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:37
L:519 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
L:529 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:533 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:38
L:534 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
L:544 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:548 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:39
L:549 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0
L:592 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:596 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:43
L:597 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:651 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:655 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:48
L:656 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
L:721 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:725 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:54
L:800 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:592
L:1331 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1336 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:60
L:1337 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0
L:1339 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:16
L:1341 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:32
L:1409 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

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L:1413 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:65

L:1414 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:0